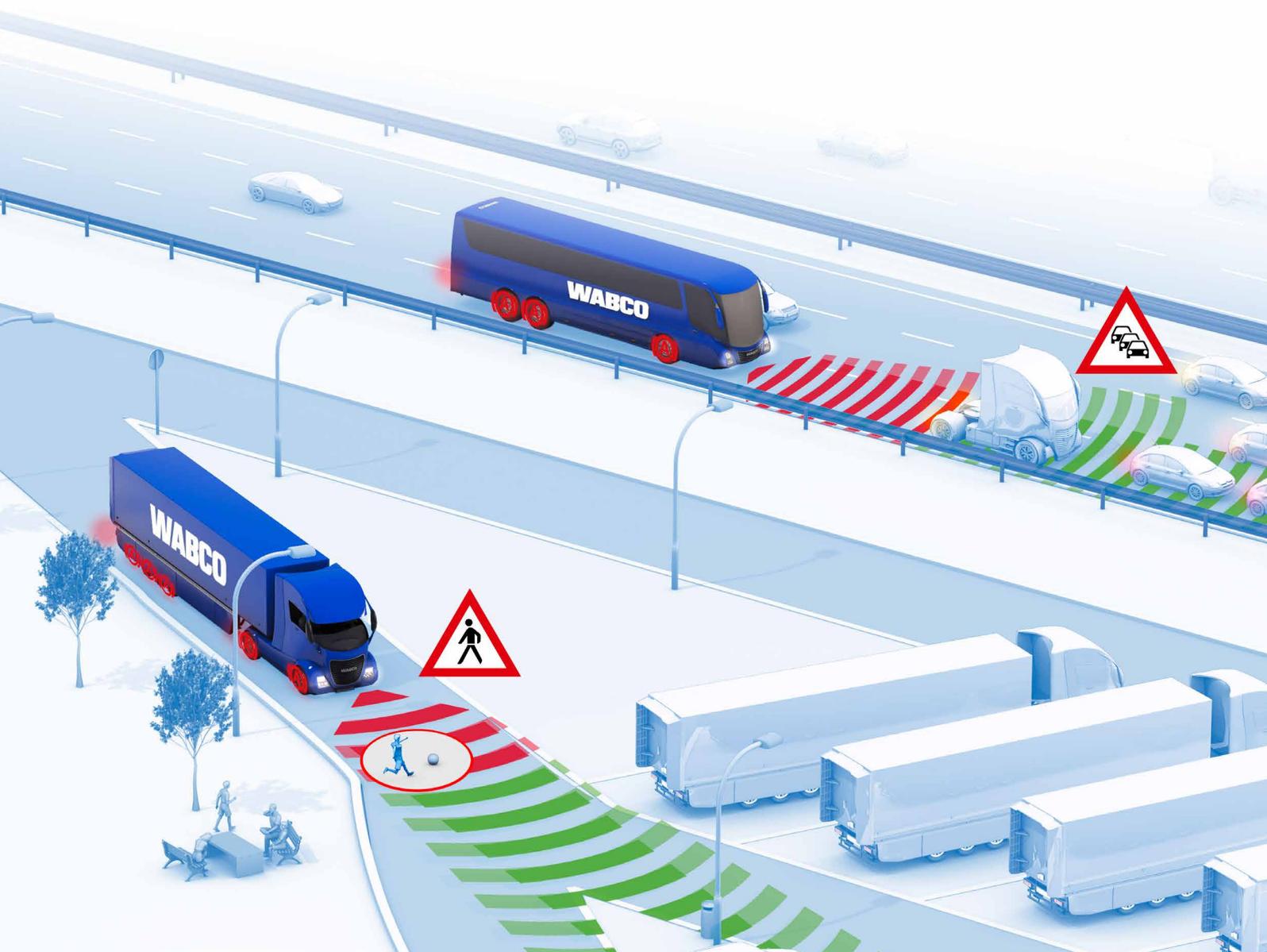


OnGuardMAX™

ADVANCED EMERGENCY BRAKING SYSTEM



WABCO

Mobilizing Vehicle Intelligence

TECHNICAL FEATURES

- Relies on sophisticated situational analysis to monitor traffic ahead
- Detects impending rear-end collisions with various objects: such as vehicles, motorcycles, bicycles and pedestrians
- Provides cross-traffic detection of pedestrians, bicycles and motorcycles even in close range situations through wide field-of-view
- Supports the driver with warning and active braking on objects to help avoid fatal accidents
- Performs up to full braking to bring the vehicle to a complete stop when confronted with moving, stopped and stationary objects
- Relies on data integration of forward-looking radar sensor with speed-dependent adaptive triple-mode beam and camera based on industry-leading EyeQ®4 chip
- Comes with integrated Lane Departure Warning
- Offers optional high precision Adaptive Cruise Control with enhanced cut-in and cut-out detection

OnGuard™ SUITE: SCALABLE COLLISION MITIGATION PERFORMANCE

Product	Hardware	 Forward Collision Warning (FCW)	 Adaptive Cruise Control (ACC)	 Advanced Emergency Braking (AEB) on moving vehicles	 Advanced Emergency Braking (AEB) on stationary vehicles	 Advanced Emergency Braking (AEB) on pedestrians
OnGuardMAX™	Radar & Camera	✓	✓	Collision Avoidance*	Collision Avoidance* from up to 80 km/h	Collision Avoidance* from up to 20 km/h
OnGuardACTIVE™	Radar	✓	✓	Collision Avoidance*	Collision Avoidance* from up to 60 km/h	✗
OnGuardASSIST™	Radar	✓	✓	Collision Mitigation	Collision Warning	✗
OnGuardADAPT™	Radar	✓	✓	✗	✗	✗
OnGuardALERT™	Radar	✓	✗	✗	✗	✗

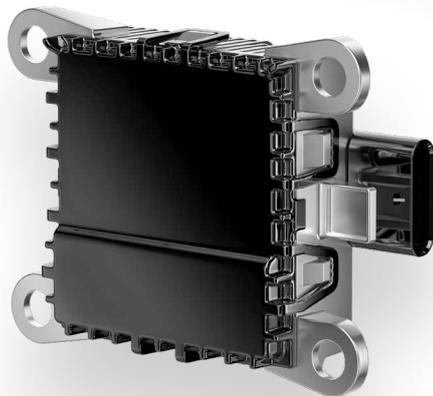
*Collision Avoidance is what the system is aiming for, but actual result of the system's intervention depends on multiple factors such as specific traffic situation, road friction and vehicle's brake capabilities as well as maintenance conditions. OnGuard is developed to support the driver in critical driving situations. OnGuard is neither intended to replace drivers' safe driving habits, nor driver control over the vehicle at any time.



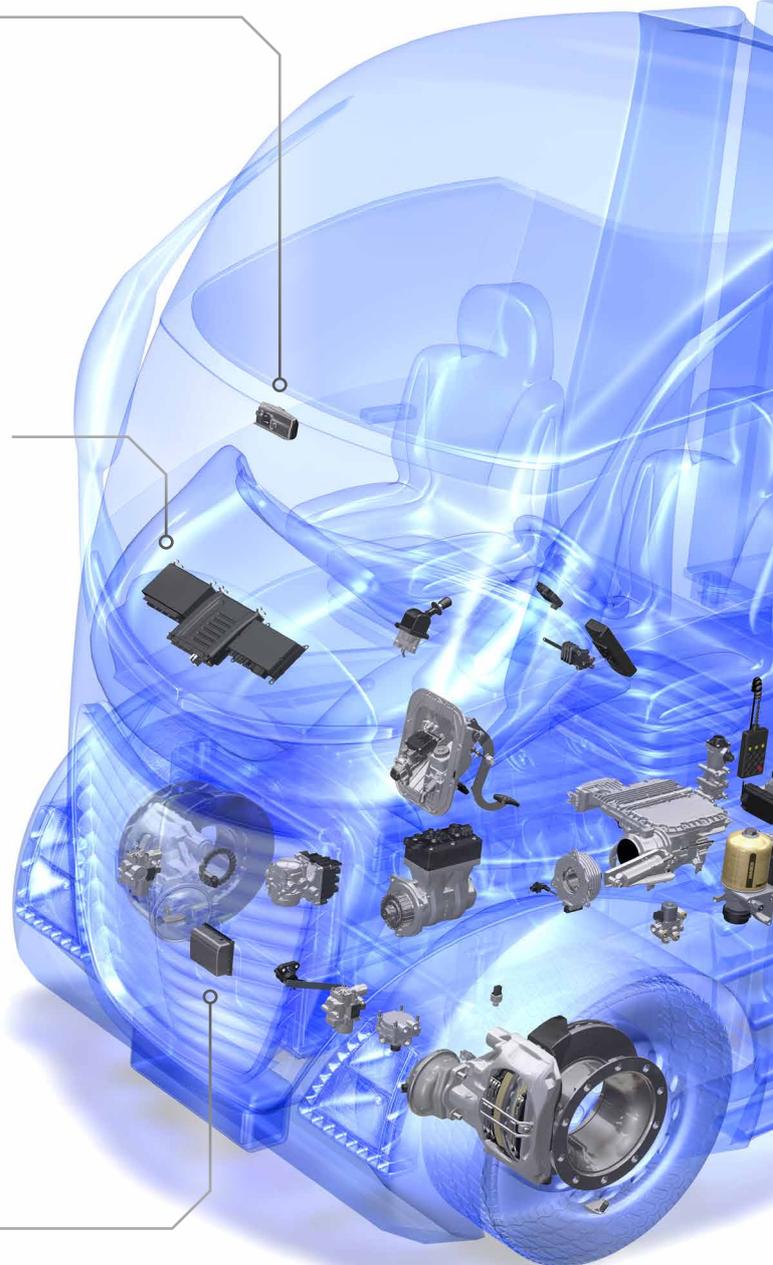
OnGuardMAX™
Camera Sensor



OnGuardMAX™
Image Processing Module



OnGuardMAX™
Radar Sensor



VALUE TO CUSTOMERS

- System tested, validated and released for a wide range of commercial vehicles, including coaches, rigid trucks and truck-trailer combinations
- Designed to comply with latest related Chinese safety legislation requiring advanced emergency braking and lane departure warning
- Advanced object detection and classification allows for outstanding reliability and premium performance
- Helps to avoid fatalities, injuries and accident-related costs
- Helps to optimize vehicle uptime
- Improves driver effectiveness across all levels of experience
- Supports driver acceptance based on advanced system performance



2007

First-to-market with active braking



35+

Available on 35+ commercial vehicle brands across the globe



40t

Able to stop a 40t truck, even in poor visibility conditions



10+ YEARS

Experience on global roads



up to 1%

Fuel savings advantage using ACC



500,000+

OnGuard™ systems sold globally

Status: 08.2019

THE WABCO DIFFERENCE

- Relies on sophisticated situational analysis to offer premium system performance
- Advanced object classification helps to detect impending rear-end collisions with various moving and stationary objects such as: vehicles, motorcycles, bicycles and pedestrians
- Skilled engineers support customers across the globe throughout the application process

For further details contact your WABCO representative

About WABCO

WABCO (NYSE: WBC) is a leading global supplier of technologies and services that improve the safety, efficiency and connectivity of commercial vehicles. Originating from the Westinghouse Air Brake Company founded nearly 150 years ago, WABCO continues to pioneer breakthrough innovations to enable autonomous driving in the commercial vehicle industry. Today, leading truck, bus and trailer brands worldwide rely on WABCO's differentiating technologies, including advanced driver assistance, braking, steering and stability control systems. Powered by its vision for accident-free driving and greener transportation solutions, WABCO is also at the forefront of advanced fleet management systems that contribute to commercial fleet efficiency. In 2018, WABCO reported sales of \$3.8 billion and more than 16,000 employees in 40 countries. For more information, visit www.wabco-auto.com.



WABCO

Mobilizing Vehicle Intelligence